BY ORDER OF THE COMMANDER
944TH FIGHTER WING

944 FW INSTRUCTION 21-127
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Maintenance

HUSH HOUSE OPERATION PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 21-1, *Managing Aerospace Equipment Maintenance.* It establishes procedures for aircraft and uninstalled engine run procedures. It applies to all maintenance activities within the 944th Fighter Wing (FW).

SUMMARY OF REVISIONS

This revision changes organization designations; adds and changes text (paragraphs **2.1.1.4.**, **2.1.2.2.1.** through **2.1.2.2.3.**, **2.1.2.3.4.**, and **2.1.2.3.5.**); and updates references (**Attachment 1**) and checklist (**Attachment 2**). An asterisk (*) indicates revisions from previous edition.

1. Responsibilities. The 944th Maintenance Squadron (MXS), Propulsion Flight (LGMP), has overall responsibility for inspection, maintenance, corrosion control, and historical records for the Hush House and test cell equipment.

2. Procedures:

2.1. The 944 MXS, Test Cell Section (LGMPT) will be responsible for the operation of the Hush House facility and ensure that the test cell and or Hush House users will:

2.1.1. For aircraft operation:

2.1.1.1. Provide a minimum of three persons; one of which will be certified to perform aircraft engine run and one qualified to operate the Hush House.

2.1.1.2. Clear Red "X" discrepancies on AFTO Form 781A, **Maintenance Discrepancy and Work Document**, that would prohibit safe engine operation prior to aircraft being towed and operated in the Hush House. Explosive munitions, including impulse carts, chaff, flare, and bomb

dummy units (BDU) will all be removed. The 20MM ammunition can remain if the gun has been safed. Emergency power unit bleed air and low power phase aircraft/engine interface checks should not be conducted in the Hush House.

2.1.1.3. Position the aircraft in the Hush House under the supervision of a qualified technician.

*2.1.1.4. Complete the Hush House Operations Checklist for Aircraft Operation (Attachment 2) prior to aircraft operation. A critical task briefing will also be performed by the supervisor of the aircraft engine operation.

2.1.1.5. Prior to engine run, the aircraft operator must establish radio contact with the Luke AFB control tower and stay in contact at all times during engine operation. If not available, a person who does have contact with the 944 FW Maintenance Operations Center (MOC), tower, or crash, fire, rescue personnel, must monitor the engine run. The aircraft operator, fire guard, control room observer and test cell cab (if used) must establish and maintain communications with each other prior to and during engine operation. The control room observer will inform the MOC by phone or radio.

2.1.1.6. Aircraft should be towed out of the Hush House if refueling is required.

2.1.1.7. After the completion of the aircraft engine run, the Hush House will be inspected for serviceability and cleaned as required.

2.1.2. For test cell/stand engine operation:

2.1.2.1. Provide a minimum of three persons, one of which is a certified engine test cell operator. All other individuals will be trained and briefed prior to operation on Hush House procedures and operation. For personnel being certified on engine test cell operation, the designated trainer/certifier who can act as the recorder, will be in the test cab at all times during the operation.

2.1.2.2. Duties of test cell individuals and emergency procedures:

*2.1.2.2.1. The test cell operator has overall responsibility for engine operation. The test cell operator will brief safety and emergency procedures to all personnel prior to the initial test cell operation. The test cell operator will perform the required tests, initiate emergency procedures, and accept or reject engine IAW applicable tech data. The test cell operator is also responsible for reviewing the engine work package for open discrepancies that would prohibit safe operation.

*2.1.2.2.2. The recorder will assist the test cell operator during engine operation by monitoring and recording all necessary engine data during the test. The recorder also observes the left side of the engine and safety of ground person during engine operation. In the case of an emergency, the recorder will start the -60 if required.

*2.1.2.2.3. The ground person and fire control room observer can be the same person. The ground person will start and stop the -60 unit as directed by the test cell operator. The ground

person will check for starter jaw disengagement on start, perform leak and serviceability checks as required by applicable tech data, and verify Hush House doors are positioned as required. In the case of a fire, the ground person will also operate the 150 lb. fire extinguisher. When in the fire control room, the ground person will act as an observer and will monitor the right side of the engine for leaks. After the bay is clear of all personnel, the ground person will initiate the Hush House fire suppression system.

2.1.2.3. Engine test cell run certification requirements:

2.1.2.3.1. Minimum 5-skill level.

2.1.2.3.2. After training, pass written tests and practical evaluations as developed by test cell section supervisor/certifier. The tests are controlled by the Maintenance Training Flight.

2.1.2.3.3. Emergency procedures test is taken semiannually with a minimum score of 100 percent.

*2.1.2.3.4. Engine Run Proficiency test is taken annually with a minimum score of 80 percent, corrected to 100 percent.

*2.1.2.3.5. After completion of training and passing both Emergency and Engine Run Proficiency tests, the individual will demonstrate, to the designated trainer, proficiency of test cell/stand operation. As a minimum, five successful engine runs will be completed IAW tech data. The certifying official approves final certification after the individual demonstrates proficiency with operation.

2.1.2.3.6. The Propulsion Flight Supervisor designates in writing highly qualified 7-levels as trainers and certifiers. Their names are placed in the Core Automated Maintenance System (CAMS) special certification roster with corresponding course codes.

2.1.2.4. The test cell cab crew, ground person, and control room observer must establish and maintain communications with each other prior to and during engine operation.

2.1.2.5. After the completion of engine test cell operation, the Hush House and test bed will be inspected for serviceability and cleaned as required.

CRAIG S. FERGUSON, Colonel, USAFR
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 11-218, *Aircraft Operation and Movement on the Ground*

T.O. 1F-16C-2-70JG-00-22, Engine *Operation High Power (Restrained*

T.O. 1F-16C-2-10JG-00-1, Aircraft *Safety*

T.O. 2J-F100-41-2, Engine *Test*

T.O. 11A-1-33, Handling *and Maintenance of Explosive Loaded Aircraft*

T.O. 33D4-6-645-1, Hush *House Operation and Maintenance*

*944 FWI 21-203, *Maintenance of Explosive Loaded Aircraft*

Abbreviations and Acronyms

AFB – Air Force Base

AFPD – Air Force Policy Directive

AFTO – Air Force Technical Order

BDU – bomb dummy unit

CAMS – Core Automated Maintenance System

FW – Fighter Wing

IAW – in accordance with

MM – millimeter

MOC – Maintenance Control Center

MXS – Maintenance Squadron

T.O. – technical order

Attachment 2

HUSH HOUSE OPERATIONS CHECKLIST FOR AIRCRAFT OPERATION

ALL PURPOSE CHECKLIST	PAGE 1 OF 1 PAGES		
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL AREA HUSH HOUSE OPERATIONS CHECKLIST FOR AIRCRAFT OPERATION	OPR 944 MXS/ LGMPT	DATE	
NO. ITEM *(Assign a paragraph number to each item. Draw a horizontal line between each major paragraph)*	YES	NO	N/A
1. Has Hush House user inspection been performed and documented in the AFTO Form 244?			
2. Has aircraft tailhook been lowered and inspected for proper hook-up and security?			
3. Has a safety/**critical task briefing** to members of their responsibilities (danger zones, fire fighting equipment, meeting point in front of the Hush House after evacuation) been performed?			
4. In case of a fire in the Hush House, the control room observer or test cell cab crew will alert the fire department by telephone extension _____. The operator will take all appropriate procedures as referenced in applicable tech data for emergency shutdown. If the fire cannot be brought under control using the two 150-pound halon fire bottles, the test cell cab crew or control room observer will activate Hush House halon system. Personnel inside will evacuate immediately upon sounding of siren and sighting of flashing lights. There is a 20-second delay between fire suppression activation and halon.			
5. Are two 150-pound halon fire extinguishers on-hand and serviceable?			
6. Has a Hush House foreign object inspection been performed prior to aircraft run?			
7. Are all airflow system doors and baffles positioned properly? Are entrance/exit doors unlocked?			
8. Has Hush House Fire Supression System been activated?			
9. Has AFTO Form 781 been reviewed prior to aircraft operation?			
10. Has a CTK inventory been conducted prior to run?			
11. Has a joint oil analysis sample and engine download, if required by applicable tech data after engine operation, been accomplished?			
12. Has a CTK inventory prior to aircraft leaving Hush House been conducted?			

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